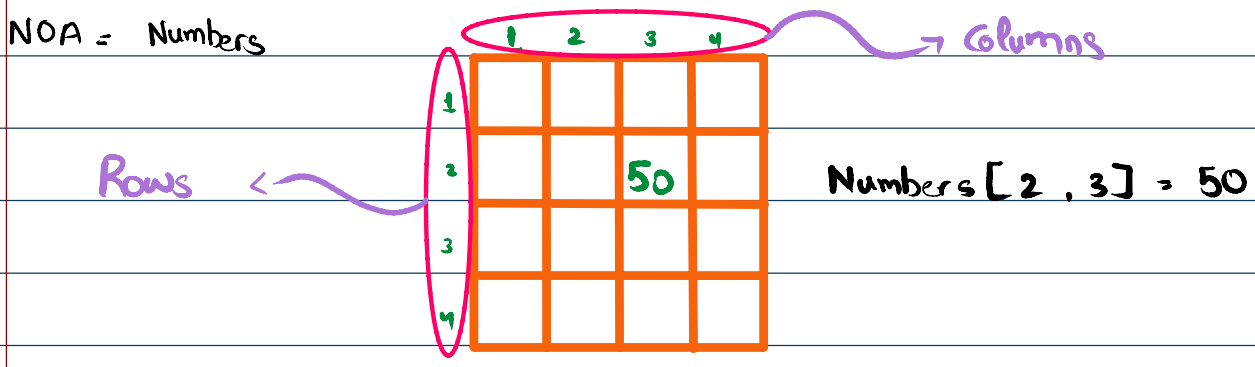
2D Array

Friday, August 20, 2021 5:12 PM

# 2D - Arrays

2D - Array is a multidimensional array, it stores data in a format consisting of rows and columns.




## Case 1 : Declaration of 2-D Arrays

Rows Column

Declare Name Of Array : Array [ L.B : U.B , LB : U.B ] Of Datatype

Declare Numbers : Array [ 1 : 4 , 1 : 4 ] Of Integer

Note : We will use concept of Nested loops (Loop with in a loop)

Question : Construct an array of datatype string and 500 Rows & 45 colums and initialize all the elements.

```
DECLARE Row-index : string
DECLARE Colum-index : string.

Declare EMPTY-BOX : ARRAY [1:500, 1:45] OF STRING
FOR Row-index = 1 to 500
    FOR Column-index = 1 to 45
        EMPTY-BOX[Row-index, Columnindex] = " "
    ENDFOR
ENDFOR
```

CASE 2 : Searching

Question: There is already an array (Search-Box) with 500 rows and 30 columns search for the word "Empty" and print how many times it was repeated.

```
·DECLARE Repeat : integer
·Declare Row-index: integer
Declare column_Index : integer
.

Repeat = 0
FOR ROW-INDEX = 1 to 500
    FOR COLUMN-INDEX = 1 to 30
        IF Searchbox [ROW-INDEX, COLUMN-INDEX] = "EMPTY"
            THEN
                REPEAT = REPEAT + 1
        END IF
```

END IF

ENDFOR

ENDFOR

PRINT REPEAT

THEY SHOULD SOLVE.

Question: There is already an array (Search-Box) with 500 rows and 356 columns search for the word "Empty" and replace it with "PAPERSOCKS"